

HR-218 Liability & Traffic Control Considerations for Low Water Stream Crossings

Key Words: Stream crossings, Bridge alternatives, Hazard signing, Low water stream crossings

ABSTRACT

The current shortage of highway funds precludes the immediate replacement of most of the bridges that have been evaluated as structurally deficient or functionally obsolete or both. A low water stream crossing (LWSC) affords an economical alternative to the replacement of a bridge with another bridge in many instances. However, the potential liability that might be incurred from the use of LWSCs has served as a deterrent to their use. Nor have guidelines for traffic control devices been developed for specific application to LWSCs. This research addressed the problems of liability and traffic control associated with the use of LWSCs.

Input to the findings from this research was provided by several persons contacted by telephone plus 189 persons who responded to a questionnaire concerning their experience with LWSCs. It was concluded from this research that a significant potential for accidents and liability claims could result from the use of LWSCs. However, it was also concluded that this liability could be reduced to within acceptable limits if adequate warning of the presence of an LWSC were afforded to road users. The potential for accidents and liability could further be reduced if vehicular passage over an LWSC were precluded during periods when the road was flooded. Under these conditions, it is believed, the potential for liability from the use of an LWSC on an unpaved, rural road would be even less than that resulting from the continuing use of an inadequate bridge.

The signs recommended for use in advance of an LWSC include two warning signs and one regulatory sign with legends as follows:

FLOOD AREA AHEAD

IMPASSABLE DURING HIGH WATER

DO NOT ENTER WHEN FLOODED

Use of the regulatory sign would require an appropriate resolution by the Board of Supervisors having responsibility for a county road.

Other recommendations include the optional use of either a supplemental distance advisory plate or an advisory speed plate, or both, under circumstances where these may be needed. It was also recommended

that LWSCs be used only on unpaved roads and that they not be used in locations where flooding of an LWSC would deprive dwelling places of emergency ground access.